



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/749,873

12/31/2003

Juha Uola

915-005.088

6328

4955

7590

02/18/2009

WARE FRESSOLA VAN DER SLUYS & ADOLPHSON, LLP
BRADFORD GREEN, BUILDING 5
755 MAIN STREET, P O BOX 224
MONROE, CT 06468

EXAMINER

KANG, INSUN

ART UNIT

PAPER NUMBER

2193

MAIL DATE

DELIVERY MODE

02/18/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/749,873	Applicant(s) UOLA ET AL.	
	Examiner INSUN KANG	Art Unit 2193	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11/20/2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-13,15-20 and 22-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4-13, 15-20, and 22-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is in response to the amendment filed on 11/20/2008.
2. Claims 1, 2, 4-13, 15-20, and 22-37 are pending in the application.

Claim Rejections - 35 USC § 112

3. Claim 37 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The originally filed specification does not describe “as if installed on said platform by classloading from the library to the electronic device.”

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 2, 4-6, 10-13, 15, 19, 20, 22-28, and 32-36 are rejected under 35 U.S.C. 102(b) as being anticipated by Blow (WO 99/53621, published on 10/21/1999).

Per claim 1:

Blow discloses:

- an interface for providing a connection with an accessory (i.e. “attachment of the external accessory 102 through interface 112,” page 4, lines 4-5)

Art Unit: 2193

-said accessory comprising a library for enabling said electronic device to use the accessory (i.e. “Accessory interface memory 118 contains the interface software needed for the mobile station 100 to functionally interact with the specific external accessory 102,” page 6 lines 6-10).

-wherein the electronic device further comprises means for providing said library available to the electronic device during operation of the electronic device (i.e. “mobile station controller 108 writes the accessory interface software into interface upload memory 106, where it is temporarily stored,” page 6 lines 12-17; “dynamic upload,” page 2, lines 18-21);

- said interface is configured for making said library available to the electronic device directly (i.e. “download of the accessory interface software code from accessory interface memory 118 in external accessory 102 to interface upload memory 106 in mobile station 100,” page 6 lines 26-30).

wherein the interface is configured for making said library available without downloading said library from said accessory device so as to make said library accessible as if said library were installed on said electronic device (“dynamic upload to the mobile station only when it is required,” page 8).

Per claim 2:

Blow further discloses:

- an application programming interface, wherein the electronic device is further configured for providing said application programming interface available to the

Art Unit: 2193

electronic device (i.e. “all of the necessary routines to interact fully with the external accessory 102,” page 6 lines 30-32).

Per claim 4:

Blow further discloses:

- an interface management module for downloading said library to the electronic device (i.e. control routines, page 6 lines 35-39).

Per claim 5:

Blow further discloses:

- said library and said application programming interface providing a connection between said accessory device and an application loaded to the electronic device (page 6 lines 30-32).

Per claim 6:

Blow further discloses:

- said interface configured for detecting an attachment of the accessory to the electronic device (i.e. “attach detector 110,” page 4 lines 3-11).

Per claim 10:

Blow further discloses:

Art Unit: 2193

- means for making said application programming interface available for at least one application loaded to the electronic device before starting the execution of said application (i.e. the accessory interface software ...may contain the algorithms for controlling the volume of the auxiliary speaker,” page 6 lines 30-35).

Per claim 11:

Blow discloses:

- An accessory comprising a library for enabling an electronic device to use the accessory (i.e. “Accessory interface memory 118 contains the interface software needed for the mobile station 100 to functionally interact with the specific external accessory 102,” page 6 lines 6-10)

- and an interface for providing a connection with said electronic device (i.e. “attachment of the external accessory 102 through interface 112,” page 4, lines 4-5).

- said interface is configured for making said library available to the electronic device during operation of the electronic device directly (i.e. “download of the accessory interface software code from accessory interface memory 118 in external accessory 102 to interface upload memory 106 in mobile station 100,” page 6 lines 26-30; “dynamic upload,” page 2, lines 18-21);

wherein the interface is configured for making said library available without downloading said library from said accessory device so as to make said library accessible as if said library were installed on said electronic device (“dynamic upload to the mobile station only when it is required,” page 8).

Art Unit: 2193

Per claim 12:

Blow further discloses:

- a functionality that is usable for applications on said electronic device (i.e. “Accessory interface memory 118 contains the interface software needed for the mobile station 100 to functionally interact with the specific external accessory 102,” page 6 lines 6-10).

Per claim 13, it is the accessory version of claim 2, respectively, and is rejected for the same reasons set forth in connection with the rejection of claim 2 above.

Per claim 15:

Blow further discloses:

-said library comprises computer program having computer readable instructions (i.e. page 6 lines 30-35).

Per claims 19-20, they are the system versions of claims 1-2 , respectively, and are rejected for the same reasons set forth in connection with the rejection of claims 1-2 above.

Per claims 22-26, they are the method versions of claims 1,2, and 4-6, respectively, and are rejected for the same reasons set forth in connection with the rejection of claims 1,2, and 4-6 above.

Per claim 27:

Blow further discloses:

- downloading said library from the accessory device to the mobile communication device when the attachment of the accessory device is detected (i.e. page 4, lines 3-11).

Per claims 28 and 32, they are the method versions of claims 5 and 10, respectively, and are rejected for the same reasons set forth in connection with the rejection of claims 5 and 10 above.

Per claim 33, it is the program product version of claim 1, respectively, and is rejected for the same reasons set forth in connection with the rejection of claim 1 above.

Per claim 34:

Blow discloses:

- A method for providing accessing an accessory of an electronic device, the method comprising storing a library to the accessory for enabling said electronic device to use the accessory (i.e. "mobile station controller 108 writes the accessory interface software into interface upload memory 106, where it is temporarily stored," page 6 lines 12-17).
- providing a connection between said electronic device and said accessory (i.e. "attachment of the external accessory 102 through interface 112," page 4, lines 4-5)

Art Unit: 2193

- providing said library available to the electronic device (i.e. “Accessory interface memory 118 contains the interface software needed for the mobile station 100 to functionally interact with the specific external accessory 102,” page 6 lines 6-10).

- making said library available to the electronic device directly (i.e. “download of the accessory interface software code from accessory interface memory 118 in external accessory 102 to interface upload memory 106 in mobile station 100,” page 6 lines 26-30); wherein the interface is configured for making said library available without downloading said library from said accessory device so as to make said library accessible as if said library were installed on said electronic device (“dynamic upload to the mobile station only when it is required,” page 8).

Per claim 35, it is the method version of claim 2, respectively, and is rejected for the same reasons set forth in connection with the rejection of claim 2 above.

Per claim 36:

Blow discloses authentication of external accessory and that the secret code stored in the mobile station is used to authenticate the external accessory (i.e. page 5, lines 27-39).

Therefore, it would be obvious that if the mobile station program(s) is not valid, the accessory library wouldn't be available for such an unauthorized program.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 7, 8, 29, and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blow (WO 99/53621, published on 10/21/1999) in view of Isberg et al. (US Patent 6,201,975) hereafter Isberg.

Per claim 7:

Blow teaches an attach detector that detects the physical connection of mobile station to external accessory by detecting a transition in current (i.e. page 4, lines 8-11). Blow does not explicitly teach detecting a detachment of the accessory from the electronic device. However, Isberg teaches such a detachment detector was known in the pertinent art, at the time applicant's invention was made, to release the connection to the accessory unit (i.e. col. 1 lines 60-65). It would have been obvious for one having ordinary skill in the art to modify Blow's disclosed system to incorporate the teachings of Isberg. The modification would be obvious because one having ordinary skill in the art would be motivated to detect the detachment of the accessory to disable the connection between the two devices and release memory space used to accommodate any code for the accessory unit as suggested by Isberg (i.e. co. 1 lines 60-65).

Art Unit: 2193

Per claim 8:

Isberg further discloses:

- an interface management module for disabling a connection between an application loaded to the electronic device and said library when the detachment of the accessory is detected (i.e. co. 1 lines 60-65).

Per claims 29 and 30, they are the method versions of claims 7 and 8, respectively, and are rejected for the same reasons set forth in connection with the rejection of claims 7 and 8 above.

8. Claims 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blow (WO 99/53621, published on 10/21/1999) in view of Wendelrup et al. (WO 02/102035 A2, published on 12/19/2002) hereafter Wendelrup.

Per claims 16 and 17:

Blow does not explicitly teach indicating the attachment and detachment of the accessory to the electronic device. However, Wendelrup teaches displaying such a status indication to the electronic device was known in the pertinent art, at the time applicant's invention was made, to indicate the accessory status information to the user (i.e. page 2, lines 23-32; page 7, lines 12-17). It would have been obvious for one having ordinary skill in the art to modify Blow's disclosed system to incorporate the teachings of Wendelrup. The modification would be obvious because one having ordinary skill in the art would be motivated to indicate the

Art Unit: 2193

attachment and detachment of the accessory device to the electronic device to the user as suggested by Wendelrup.

9. Claims 9, 18, and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blow (WO 99/53621, published on 10/21/1999) in view of Applicant's Admitted Prior Art (hereinafter referred to as "APA") disclosed in the background section of the instant application.

Per claim 9:

Blow discloses the "accessory specific interface software being stored in the external accessory itself (page 2, lines 19-20)." Blow does not explicitly teach that the accessory further comprising at least one application to be loaded to the electronic device. However, APA teaches downloading of application software stored on an accessory device to a mobile device was known in the pertinent art, at the time applicant's invention was made, to download a desired application of the accessory device to the electronic device (i.e. page 3 lines 16-18). It would have been obvious for one having ordinary skill in the art to modify Blow's disclosed system to incorporate the teachings of APA. The modification would be obvious because one having ordinary skill in the art would be motivated to download any desired application stored on the external accessory device.

Per claims 18 and 31, they are the accessory and method versions of claim 9 respectively, and are rejected for the same reasons set forth in connection with the rejection of claim 9 above.

Art Unit: 2193

10. Claim 37 is rejected under 35 U.S.C. 103(a) as being unpatentable over Blow (WO 99/53621, published on 10/21/1999) in view of Zhuang et al. (2004/0123270) hereafter Zhuang.

Per claim 37:

Blow discloses: a platform having a hardware section and a software section, said platform being configured to accept and store information about said library after said library is detected, wherein the electronic device is further configured to use the information to access said library when said library is needed by an application running on said electronic device, said library being usable by said application as if installed on said platform (i.e. page 6, lines 4-17, 26-35).

Blow does not explicitly teach class loading. However, Zhuang teaches that class loading in a mobile Java device was known in the pertinent art, at the time applicant's invention was made, to load classes (i.e. 0004). It would have been obvious for one having ordinary skill in the art to modify Blow's disclosed system to incorporate the teachings of Zhuang. The modification would be obvious because one having ordinary skill in the art would be motivated to dynamically load classes into a JVM if the interface code is written in Java.

Response to Arguments

11. Applicant's arguments filed on 11/20/2008 have been fully considered but they are not persuasive.

The applicant states that: downloading or uploading software to an electronic device is unnecessary if software is already installed or seems to be installed on said electronic device as

Art Unit: 2193

presently claimed. Blow clearly does not teach or suggest loading only pieces of code as needed from a library to the electronic device, but instead discloses only loading the entire interface accessory software when the accessory is used. In contrast, the present claimed invention is arranged so that no downloading of the entire accessory interface software is needed (remark, 9-11). That software of Blow is not accessible as if it were installed on the electronic device, rather, it is downloaded to the electronic device. Blow explicitly uses the word entirely (remark, 11).

In response, the instant specification simply states that the libraries are made available without downloading by “using other means (page 11)” and when the library is accessed by an application running on the device, the device and the accessory communicate to make the library of the accessory accessible to the application as if the library were installed on the device. This approach may require that the Java platform be modified in the installation phase to find the library from the accessory during run-time (page 12). There is not specific explanation for “as if it were installed on the mobile station.” Furthermore, Blow discloses “dynamic upload” of the interface software to the mobile station only when it is required. When the interface software is not needed, it is not downloaded but it is made available for dynamic upload when it is required. Therefore, Blow discloses the limitation. Furthermore, the claims do not recite “loading only pieces of code as needed from a library to the electronic device.”

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to INSUN KANG whose telephone number is (571)272-3724. The examiner can normally be reached on M-R 7:30-6 PM.

Art Unit: 2193

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lewis A. Bullock, Jr. can be reached on 571-272-3759. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Insun Kang/
Examiner, Art Unit 2193